

# EE698G Assignment 4

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## 1 Q1

Higher motion noise covariances lead to greater prediction error while higher measurement covariances prevent the robot from accurately updating its location after it receives a landmark measurement.

UKF performs better than EKF since it does not perform linearization of motion model and measurement model which reduces error when noise covariances are large.

UKF in general has the same complexity as EKF. It does save on the complexity required for Jacobian computation required by EKF